Serial No.: 10/605,598

Confirmation No.: 2597

Attorney Docket No.: 0173.043.PCUS00

CLAIMS LISTING:

1. (Currently Amended) Disc brake for a heavy vehicle having an axle pressure between 6 and

14 tons, comprising a disc-shaped rotor (8) consisting of a cast iron alloy and having [[a]] an

active radius R and a caliper (30) supporting a brake lining (32) which is intended to be pressed

against said rotor (8) during braking, in which said rotor (8) and brake lining (32) are arranged to

absorb a brake power corresponding to a braking torque between 12 and 25 kNm and in which

said brake lining (32) has a radial extent B, characterized in that a ratio B/R between the radial

extent B of the lining (32) and the active radius R of the rotor (8) is less than 0.38 and thereby

substantially limiting a number of band shaped wear modes.

2. (Previously Presented) Disc brake according to Claim 1, characterized in that said brake

lining (32) is designed to absorb a brake power corresponding to a braking torque from about 16

kNm, wherein said brake lining (32) has a radial extent of less than 70 mm, to about 25 kNm,

wherein said brake lining (32) has a radial extent of less than 80 mm.

3. - 4. (Cancelled)

5. (Previously Presented) Disc brake according to Claim 2, characterized in that said rotor (8) is

of substantially symmetrical configuration with respect to a plane running at right angles through

the rotational axis and has a central bushing (12) intended for fastening to a wheel axle (6), the

wear surfaces of the brake disc remaining flat when heated.

6. (Currently Amended) Disc brake according to Claim 2, characterized in that the active radius

of the rotor (8) is greater than 185 mm.

7. (Previously Presented) Disc brake according to Claim 2, characterized in that the brake

lining (32) is configured having a tangential modulus of elasticity E greater than 400 Mpa at a

contact pressure of 2 MPa at room temperature.

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8. (Previously Presented) Disc brake according to Claim 2, characterized in that said caliper (30)

supports two brake cylinders which are meant to press the brake lining against the rotor.

9. (Currently Amended) Vehicle having an axle pressure between 6 and 14 tons, comprising a

disc brake having a disc-shaped rotor (8), consisting of a cast iron alloy and having [[a]] an active

radius R, and a caliper (30) supporting a brake lining (32) which is intended to be pressed against

said rotor (8) during braking, in which said brake lining (32) has a radial extent B, characterized

in that a ratio B/R between the radial extent B of the lining (32) and the active radius R of the

rotor (8) is less than 0.38 and thereby substantially limiting a number of band shaped

wear modes.

10. (Previously Presented) Vehicle according to Claim 9, characterized in that said axle pressure

amounts to between 11 and 14 tons and in that said brake lining (32) has a radial extent of less

than 80 mm.

11. (Previously Presented) Vehicle according to Claim 9, characterized in that said axle pressure

amounts to between 8.5 and 11 tons and in that said brake lining (32) has a radial extent of less

than 75 mm.

12. (Previously presented) Vehicle according to Claim 9, characterized in that said axle pressure

amounts to between 6 and 8.5 tons and in that said brake lining (32) has a radial extent of less

than 70 mm.

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13. (Currently Amended) A disc brake means for retarding motion of a heavy vehicle and for

limiting a number of band shaped wear modes, said brake means having an axle pressure

between six and fourteen tons and comprising a disc-shaped rotor (8) consisting of a cast iron

alloy and having [[a]] an active radius R and a caliper (30) supporting a brake lining means (32)

for pressing against said rotor (8) during braking, said rotor (8) and brake lining means (32)

absorbing a brake power corresponding to a braking torque between 12 and 25 kNm and said

brake lining means (32) having a radial extent B and characterized in that a ratio B/R between the

radial extent B of the brake lining means (32) and the active radius R of the rotor (8) is less

than 0.38.

14. (Previously Presented) The disc brake means as recited in Claim 13, wherein said brake

lining means (32) is configured for absorbing a brake power corresponding to a braking torque

from about 16 kNm, wherein said brake lining means (32) has a radial extent of less than 70 mm,

to about 25 kNm, and wherein said brake lining means (32) has a radial extent of less

than 80 mm.

15. (Previously Presented) The disc brake means as recited in Claim 14, wherein rotor (8) is of

substantially symmetrical configuration with respect to a plane running at right angles through

the rotational axis and has a central bushing means (12) for fastening to a wheel axle (6) and a

wear surfaces of the brake disc remaining flat when heated.

16. (Currently Amended) The disc brake means as recited in Claim 14, wherein [[a]] the active

radius of said rotor (8) is greater than 185 mm.

17. (Previously Presented) The disc brake means as recited in Claim 14, wherein said brake

lining means (32) has a tangential modulus of elasticity E greater than 400 Mpa at a contact

pressure of 2 MPa at room temperature.

18. (Currently Amended) The disc brake means as recited in Claim 14, wherein said caliper (30)

supports two brake cylinders that press the brake lining means against the rotor.

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